

Federal Communications Commission

DUCKET FILE COPY ORIGINAL

FCC MAIL SECTION

SEP 3 3 20 PM '99
Before the
Federal Communications Commission
Washington, D.C. 20554

In the Matter of)
Amendment of Parts 1, 21 and 74 to Enable) MM Docket No. 97-217
Multipoint Distribution Service and)
Instructional Television Fixed Service) File No. RM-9060
Licensees to Engage in Fixed)
Two-Way Transmissions)
Request For Declaratory Ruling on the Use)
of Digital Modulation by Multipoint)
Distribution Service and Instructional)
Television Fixed Service Stations)

ERRATUM

Released: September 2, 1999

By the Chief, Video Services Division:

Some of the rules in Appendix C to the Commission's recent decision in the matter of *Amendment of Parts 1, 21 and 74 to Enable Multipoint Distribution Service and Instructional Television Fixed Service Licensees to Engage in Fixed Two-Way Transmissions, Report and Order on Reconsideration*, MM Docket 97-217, FCC 99-178 (rel. July 29, 1999) were inadvertently misprinted. The affected rule sections are attached to this erratum and a corrected version of the document is available on the Commission's internet site. For further information, please contact Dave Roberts at (202) 418-1600.

FEDERAL COMMUNICATIONS COMMISSION



Barbara A. Kreisman, Chief
Video Services Division
Mass Media Bureau

ATTACHMENT

The following changes should be made in Appendix C to *Amendment of Parts 1, 21 and 74 to Enable Multipoint Distribution Service and Instructional Television Fixed Service Licensees to Engage in Fixed Two-Way Transmissions, Report and Order on Reconsideration*, MM Docket 97-217, FCC 99-178 (rel. July 29, 1999).

In the formulas in Rule sections §§ 21.904(a), 21.913(e), 74.935(a) and 74.985(e), references to "log10(X/6) dBW" should read "10 log(X/6) dBW"

§ 21.902(b)(7)

(b)

(7) Notwithstanding the above, main, booster and response stations shall use the following formulas, as applicable, for determining compliance with: (1) Radiated field contour limits where bandwidths other than 6 MHz are employed at stations utilizing digital emissions; and (2) Cochannel and adjacent channel D/U ratios where the bandwidths in use at the interfering and protected stations are unequal and both stations are utilizing digital modulation or one station is utilizing digital modulation and the other station is utilizing either 6 MHz NTSC analog modulation or 125 kHz analog modulation (I channels only).

§ 21.904(b)

(b) If a main or booster station sectorizes or otherwise uses one or more transmitting antennas with a non-omnidirectional horizontal plane radiation pattern, the maximum EIRP in a given direction shall be determined by the following formula:

$$\text{EIRP} = 33 \text{ dBW} + 10 \log(X/6) \text{ dBW} + 10 \log(360/\text{beamwidth}) \text{ dBW}$$
, where X is the channel width in MHz and $10 \log(360/\text{beamwidth}) \leq 6 \text{ dB}$.

Beamwidth is the total horizontal plane beamwidth of the individual transmitting antenna for the station or any sector measured at the half-power points.

§ 21.909(b),(c)(2),(d),(g)(6)(i)(ii) & (n)

(b) MDS response stations that utilize the 2150-2162 MHz band, the 2500-2686 MHz band, and/or the 125 kHz channels may be installed and operated without an individual license, to communicate with a response station hub, provided that the conditions set forth in paragraph (g) of this section are met and that the MDS response stations' technical parameters are consistent with all applicable rules in this part and with the terms and conditions set out in the Commission's Declaratory Ruling and Order, 11 FCC Rcd 18839 (1996).

(c)

(2) Submit the following to the Commission's copy contractor, both in hard copy and on sequential 3.5" DSHD computer diskettes in ASCII for all Appendix D data and in a format to be specified by public notice for all other submissions:

(d) An applicant for a response station hub license shall, pursuant to paragraph (c)(2)(iii) of this section, submit to the Commission's copy contractor, in a format to be specified by the Commission at a later date, the following:

(1) the channel plan (including any guardbands at the edges of the channel) to be used by MDS response stations in communicating with each response station hub, including a statement as to whether the applicant will employ the same frequencies on which response stations will transmit to also transmit on a point-to-multipoint basis from an MDS station or MDS booster station; and

(g)

(6)

(i) First notifies the Commission, in a format to be specified by public notice, of the altered number of response stations of such class(es) to be operated simultaneously in such region, and certifies in that notification that it has complied with the requirements of paragraphs (g)(6)(ii) and (iii) of this section, and that the interference data submitted under paragraph (g)(6)(ii) is complete and accurate; and

(ii) Provides the Commission's copy contractor with a set of sequential 3.5" DSHD diskettes in ASCII format which update the previously filed response station data (*see* § 21.909(c)(2)(ii)) and with an analysis, in a format to be specified by public notice establishing that such alteration will not result in any increase in interference to the protected service area or protected receive sites of any existing or previously-proposed, cochannel or adjacent channel MDS or ITFS station or booster station, to the protected service area of any MDS Basic Trading Area or Partitioned Service Area licensee entitled to protection pursuant to paragraph (d)(3) of this section, or to any existing or previously-proposed, cochannel or adjacent channel response station hub, or response station under § 21.949 or § 74.949 of this chapter; or that the applicant for or licensee of such facility has consented to such interference; and

(n) All response stations utilizing an EIRP greater than 18 dBW shall be installed by the associated hub licensee or by the licensee's employees or agents. (Note: For the purposes of this section, all EIRP dBW values assume the use of a 6 MHz channel. For channel bandwidths other than 6 MHz, the EIRP dBW values should be adjusted up (channel > 6 MHz) or down (channel < 6 MHz) by $10 \log(X/6)$ dBW, where X is the channel width in MHz.) For response stations located within 1960 feet of an ITFS receive site registered and built prior to the filing of the application for the hub station license, the hub licensee must notify the licensee of the ITFS receive site at least one business day prior to the activation of these response stations. The notification must contain, for each response station to be activated, the following information: (1) name and telephone number of a contact person who will be responsible for coordinating the resolution of any interference problems; (2) street address; (3) geographic coordinates to the nearest second; (4) channels/subchannels (transmit only); and (5) transmit antenna pattern, EIRP, orientation and height AMSL. (If any or all of the elements of item (5) are not known with specificity at the time of notification, the hub licensee may, instead, specify the worst-case values for the class of response station being activated.) Such notice to the ITFS licensee shall be given in writing by certified mail unless the ITFS licensee has requested delivery by email or facsimile. The ITFS licensee may waive the notification requirement on a site-specific basis or on a system-wide basis. The notification provisions of this section shall not apply if:

§ 21.913(b) & (e)

(b) ...The applicant additionally is required to submit to the Commission's copy contractor (and to the Commission upon staff request), both in hard copy, and on sequential 3.5" DSHD computer diskettes in a form to be specified by the Commission by public notice, duplicates of the Form 331 filed with Mellon Bank, and the following information:...

(e) ...An MDS licensee or conditional licensee seeking to install a low-power MDS signal booster station under this rule must, within 48 hours after installation, submit FCC Form 331 to the Commission in Washington, DC, and submit to the Commission's copy contractor (and to the Commission upon staff request), both in hard copy, and on sequential 3.5" DSHD computer diskettes in a format to be specified by public notice, duplicates of the Form 331 filed with the Commission, and the following (which also shall be submitted to the Commission only upon Commission staff request at any time):...

§ 21.949 (a)(b)(5) & (d)

(a) The provisions of § 21.909(a), (e), (h), (j), (l) and (m) and § 74.939(j) shall also apply with respect to authorization of 125 kHz channel MDS response stations not authorized under a response station hub license. The applicant shall comply with the requirements of §21.902 and § 21.938 where appropriate, as well as with the provisions of §§ 21.909, 21.913, 74.939 and 74.985 regarding the protection of response stations hubs and booster (and primary) service areas from harmful electromagnetic interference, using the appropriately adjusted interference protection values based upon the ratios of the bandwidths involved.

(b) An application for a license to operate a new or modified 125 kHz channel MDS response station not under a response station hub license shall be filed with Mellon Bank on FCC Form 331. The applicant shall supply the following information and certification on that form for each response station:...

(5) A certification that all licensees and applicants appropriately covered under the provisions of (a), above, have been served with copies of the application.

(d) During breaks in communications, the unmodulated carrier frequency of an analog transmission shall be maintained within 35 kHz of the assigned frequency at all times. Adequate means shall be provided to insure compliance with this rule.

§ 74.903(a)(6) & (k)

(a)

(6) Notwithstanding the above, main, booster and response stations shall use the following formulas, as applicable, for determining compliance with: (1) Radiated field contour limits where bandwidths other than 6 MHz are employed at stations utilizing digital emissions; and (2) Cochannel and adjacent channel D/U ratios where the bandwidths in use at the interfering and protected stations are unequal and both stations are utilizing digital modulation or one station is utilizing digital modulation and the other station is utilizing either 6 MHz NTSC analog modulation or 125 kHz analog modulation (I channels only).

(k) ...Any emissions more than 125 kHz beyond either channel edge, including harmonics, shall be attenuated at least 60 dB below peak output power when analog modulation is employed, or at least 60 dB below licensed average output power when digital modulation is employed (or, when subchannels are used, the appropriately adjusted value based upon the ratio of the channel-to-subchannel bandwidths)....

§ 74.911 (a)(2) & (3)

(2) In the second group are applications for major changes in the facilities of authorized stations. A major change for an ITFS station will be any proposal to add new channels, change from one channel (or channel group) to another, except as provided for in § 74.902(f), change polarization, increase the EIRP in any direction by more than 1.5 dB, increase the transmitting antenna height by 25 feet or more, or relocate a facility's transmitter site by 10 miles or more. Major change applications are subject to paragraphs (d) and (e) of this section.

(3) The third group consists of applications for all other licenses and all other changes in the facilities of authorized stations.

§ 74.935(b)

(b) If a main or booster station sectorizes or otherwise uses one or more transmitting antennas with a non-omnidirectional horizontal plane radiation pattern, the maximum EIRP over a 6 MHz channel in dBW in a given direction shall be determined by the following formula:

$$\text{EIRP} = 33 \text{ dBW} + 10 \log(X/6) \text{ dBW} + 10 \log(360/\text{beamwidth}) \text{ dBW},$$
 where X is the channel width in MHz and $10 \log(360/\text{beamwidth}) \leq 6 \text{ dB}$.

Beamwidth is the total horizontal plane beamwidth of the individual transmitting antenna for the station or any sector measured at the half-power points.

§ 74.939(b),(c)(2),(d),(g)(6)(i)(ii) & (p)

(b) ITFS response stations that utilize the 2150-2162 MHz band pursuant to § 74.902(f), the 2500-2686 MHz band, and/or the 125 kHz channels identified in paragraph (j) of this section may be installed and operated without an individual license, to communicate with a response station hub, provided that the conditions set forth in paragraph (g) of this section are met and that ITFS response stations' technical parameters are consistent with all applicable rules in this part and with the terms and conditions set out in the Commission's Declaratory Ruling and Order, 11 FCC Rcd 18839 (1996).

(c)

(2) Submit the following to the Commission's copy contractor, both in hard copy and on sequential 3.5" DSHD computer diskettes in ASCII for all Appendix D data and in a format to be specified by public notice for all other submissions:

(d) An applicant for a response station hub license shall, pursuant to paragraph (c)(2)(iii) of this section, submit to the Commission's copy contractor the following:

(1) The channel plan (including any guardbands at the edges of the channel) to be used by ITFS response stations in communicating with the response station hub, including a statement as to whether the applicant will employ the same frequencies on which response stations will transmit to also transmit on a point-to-multipoint basis from an MDS station or MDS booster station; and

(g)

(6)

(i) First notifies the Commission, in a format to be specified by public notice, of the altered number of response stations of such class(es) to be operated simultaneously in such region, and certifies in that notification that it has complied with the requirements of paragraphs (g)(6)(ii) and (iii) of this section, and that the interference data submitted under paragraph (g)(6)(ii) is complete and accurate; and

(ii) Provides the Commission's copy contractor with a set of sequential 3.5" DSHD diskettes in ASCII format which update the previously filed response station data (*see* § 21.909(c)(2)(ii)) and with an analysis, in a format to be specified by public notice, establishing that such alteration will not result in any increase in interference to the protected service area or protected receive sites of any existing or previously-proposed, cochannel or adjacent channel MDS or ITFS station or booster station, to the protected service area of any MDS Basic Trading Area or Partitioned Service Area licensee entitled to protection pursuant to paragraph (d)(3) of this section, or to any existing or previously-proposed, cochannel or adjacent channel response station hub, or response station under § 21.949 of this chapter or § 74.949; or that the applicant for or licensee of such facility has consented to such interference; and

(p) All response stations utilizing an EIRP greater than 18 dBW shall be installed by the associated hub licensee or by the licensee's employees or agents. (Note: For the purposes of this section, all EIRP dBW values assume the use of a 6 MHz channel. For channel bandwidths other than 6 MHz, the EIRP dBW values should be adjusted up (channel >6 MHz) or down (channel <6 MHz) by $10 \log(X/6)$ dBW, where X is the channel width in MHz.) For response stations located within 1960 feet of an ITFS receive site registered and built prior to the filing of the application for the hub station license, the hub licensee must notify the licensee of the ITFS receive site at least one business day prior to the activation of these response stations. The notification must contain, for each response station to be activated, the following information: (1) name and telephone number of a contact person who will be responsible for coordinating the resolution of any interference problems; (2) street address; (3) geographic coordinates to the nearest second; (4) channels/subchannels (transmit only); and (5) transmit antenna pattern, EIRP, orientation and height AMSL. (If any or all of the elements of item (5) are not known with specificity at the time of notification, the hub licensee may, instead, specify the worst-case values for the class of response station being activated.) Such notice to the ITFS licensee shall be given in writing by certified mail unless the ITFS licensee has requested delivery by email or facsimile. The ITFS licensee may waive the notification requirement on a site-specific basis or on a system-wide basis. The notification provisions of this section shall not apply if:

Also, § 74.939(q)(r)(s) and (t) are duplicative and are deleted. Paragraph (u) of that section is redesignated as paragraph (q).

§ 74.949(a)(b)(5) & (d)

(a) The provisions of § 74.939(a), (e), (h), (j), (k), (n) and (o) shall also apply with respect to the authorization of 125 kHz channel ITFS response stations not authorized under a response station hub license. The applicant shall also comply with the requirements of § 74.903 and § 21.938 where appropriate, as well as with the provisions of §§ 21.909, 21.913, 74.939 and 74.985 regarding the protection of response station hubs and booster (and primary) service areas from harmful electromagnetic interference, using the appropriately adjusted interference protection values based upon the ratios of the bandwidths involved.

(b) An application for a license to operate a new or modified 125 kHz channel ITFS response station not under a response station hub license shall be filed with the Commission in Washington, D.C., on FCC Form 331. The applicant shall supply the following information and certification on that form for each response station:...

(5) A certification that all licensees and applicants appropriately covered under the provisions of (a), above, have been served with copies of the application.

(d) During breaks in communications, the unmodulated carrier frequency of an analog transmission shall be maintained within 35 kHz of the assigned frequency at all times. Adequate means shall be provided to insure compliance with this rule.

§ 74.985(b) & (e)

(b) ...The applicant additionally is required to submit to the Commission's copy contractor (and to the Commission upon staff request), both in hard copy, and on sequential 3.5" DSHD computer diskettes in a form to be specified by the Commission by public notice, duplicates of the Form 331 filed with Mellon Bank, and the following information:...

(e) ...An ITFS licensee or conditional licensee seeking to install a low-power ITFS signal booster station under this rule must, within 48 hours after installation, submit FCC Form 331 to the Commission in Washington, DC, and submit to the Commission's copy contractor (and to the Commission upon staff request), both in hard copy, and on sequential 3.5" DSHD computer diskettes in a format to be specified by public notice, duplicates of the Form 331 filed with the Commission, and the following (which also shall be submitted to the Commission only upon Commission staff request at any time):...

Footnote 22 in Part 101 is not deleted. References to that footnote in the Table of Allotments are deleted in the listing of 2,150-2,160 MHz and 2,650-2,690 MHz.